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CLAIMS

What is claimed is:

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1.

A method for processing network layer messages within a wireless communication system, the network layer including within it certain functional layers, including a radio resource function, a mobility management function, and a connection management function with at least the radio resource function being normally assumed to be a transport mechanism for the mobility management and connection management functions, the method comprising the steps of:

examining a network layer message to determine, prior to routing it to any functional layer, whether it is associated with connection management, mobility management, or radio resource management; and

routing the message directly to the respective connection management, mobility management, or radio resource management functional layer, directly and without passing the message between functional layers.

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- 2. A method as in claim 1 wherein the steps of examining and routing the message are performed within a network layer thread as the message is first received by the network layer.
- 3. A method as in claim 1 wherein the steps of examining and routing the message are performed within a lower layer layer thread as the message is passed up to the network layer by the lower layer.
 - 4. A method as in claim 1 wherein the step of examining only processes messages traveling in an uplink direction from a mobile station towards network subsystem components.

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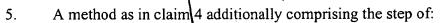
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for messages thaveling in a downlink direction from network subsystem components towards the mobile station;

processing downlink network layer messages in a direct manner such that the network layer messages do not step through other layer protocol stacks.

- 6. A method as in claim 5 additionally comprising the step of directly routing network layer messages that do not require acknowledgment.
- 7. A method as in claim 5 wherein downlink network layer messages that comprise connection management messages are first routed to the mobility management function.
- A method as in claim 3 wherein network layer messages that comprise mobility 8. management messages are first routed to the radio resource function.
- 9. A method as in claim 1 wherein the steps of examining a network layer message and routing the message directly to the respective functional layer are performed in a subsystem incorporating Base Transceiver System (BTS), Base Station 15 Controller (BSC), and Mobile Switching Center Subsystems (MSC).
 - A method as in claim 1 wherein the steps of examining the network layer 10. message and routing the message directly to the respective functional layer are performed in a mobile station (MS).

